BULLETIN OF THE AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS
VOL. 27, NO. 12 (DECEMBER, 1943) PP. 1655-1674

INDEX OF VOLUME 27 (1943)

Acadia Parish, Louisiana, Subsurface Study of Jennings Field. By C. B. Roach 1102
Accidents, Climatic, and Landscape. By C. A. Cotton. Review by Burton Wallace Collins . 1013
Activities of the Association. The Association Round Table 672
Aerial Photographs, Measurement of Dip Angles on. Geological Note by Louis Desjardins . 1534
———, Their Use and Interpretation. By A. J. Eardley. Review by Louis Desjardins . . . 95
———, and Their Applications. By H. T. U. Smith. Review by Louis Desjardins 1160
Age and Stratigraphy of Seguin Formation of Central Texas. By M. W. Beckman and F. E. Turner 608
Age of Spavinaw Granite, Oklahoma, New Evidence Concerning. Geological Note by W. E. Ham and R. H. Dott 1626
Alberta, Stratigraphy and Structure of Moose Mountain Area. By Donald J. MacNeil . . 38
American Association of Petroleum Geologists, Analysis of Membership of. By W. B. Heroy. The Association Round Table 1559
———, Constitution and By-Laws. The Association Round Table 705
———. Financial Statement for 1942. The Association Round Table 403
———. Joint Annual Meeting, Fort Worth, April 7–9, 1943. By F. L. Aurin. The Association Round Table 233, 316
———. Members in Civilian Capacities with Government in War Effort. The Association Round Table 691
———. Members in the Armed Forces. The Association Round Table 232, 690
———. Membership List, March 1, 1943. The Association Round Table 323
———. Minutes, Twenty-Eighth Annual Business Meeting, Hotel Texas, Fort Worth, Texas, April 8–9, 1943. By Edmond O. Markham. The Association Round Table 670
———. Newly Elected Officers. The Association Round Table 662
———. Past and Present Officers. The Association Round Table 316
———, Rules for the Sidney Powers Memorial Medal Award of. The Association Round Table 879
———. Supplementary Membership List, September 4, 1943. The Association Round Table . 1275
———. Titles of Papers Presented at Annual Meeting. The Association Round Table . . 667
———. Twenty-Eighth Annual Meeting, Hotel Texas, Fort Worth, Texas, April 7–9, 1943. The Association Round Table 662
———. Twenty-Ninth Annual Meeting, Dallas, Texas, March 21–23, 1944. Announcement. The Association Round Table 1564, 1652
———, Society of Economic Paleontologists and Mineralogists, Society of Exploration Geophysicists. Joint Annual Meeting, Fort Worth, April 7–9, 1943. By F. L. Aurin. The Association Round Table 233, 316
———, Society of Economic Paleontologists and Mineralogists, and the Society of Exploration Geophysicists, Joint Annual Meeting, Hotel Texas, Fort Worth, Texas, April 7–9, 1943. The Association Round Table 662
———, Society of Economic Paleontologists and Mineralogists, and Society of Exploration Geophysicists. Joint Annual Meeting, March 21–23, 1944, Dallas, Texas. Announcement. At Home and Abroad 1564
American Institute of Mining and Metallurgical Engineers Petroleum Division. Petroleum Development and Technology, 1943. Review by J. Zaba 1556
Analysis, Chemical, of Crude Oils, Application of, to Problems of Petroleum Geology. By K. W. Barr, F. Morton, and A. R. Richards 1595
——— of Membership of American Association of Petroleum Geologists. By W. B. Heroy. The Association Round Table 1559
Andrews County, Texas, Embar Field. Geological Note by Taylor Cole 538
Angles, Dip, on Aerial Photographs, Measurement of. Geological Note by Louis Desjardins . 1534
Anse La Butte Dome, St. Martin Parish, Louisiana. By Fred W. Bates and J. B. Wharton, Jr. 1123
Appalachian Area, Developments in 1942. By Appalachian Geological Society 835
Appalachian Geological Society. Developments in Appalachian Area in 1942 835
Application of Chemical Analysis of Crude Oils to Problems of Petroleum Geology. By K. W. Barr, F. Morton, and A. R. Richards 1595
Applications of Aerial Photographs. By H. T. U. Smith. Review by Louis Desjardins . . 1160
——— of Geology, Report of Committee on. By Carey Croneis, chairman. The Association Round Table 700
Appraisal of Economic Paleontology and Mineralogy. By Herschel L. Driver 938

Armed Forces, Members of A.A.P.G. in. The Association Round Table 690
Association, Twenty-Ninth Annual Meeting of, March 21–23, 1944, Dallas, Texas, Announcement. At Home and Abroad 1652
Association Committees 102, 230, 314, 562, 660, 876
Association Membership List, March 1, 1943. The Association Round Table 323
Association Officers, Newly Elected. April 7–9, 1943. The Association Round Table . . . 662
Association Round Table 101, 229, 313, 560, 659, 875, 1025, 1168, 1273, 1397, 1559, 1646
At Home and Abroad 107, 241, 567, 714, 882, 1033, 1171, 1286, 1402, 1648
Aurin, F. L., chairman. Report of the National Service Committee. The Association Round Table 688
———. Joint Annual Meeting, Fort Worth, April 7–9, 1943. The Association Round Table 233, 316
———. Memorandum of National Service Committee. The Association Round Table . . 412
———. Open Letter to Geological Departments in Petroleum Industry. The Association Round Table 237
———. Report of President. The Association Round Table 671
———. The Petroleum Geologist and the War 929

Ballard, Norval, Howells, W. C., and Irwin, Joseph S. Regional Geology of Dakota Basin. Discussion 90
Barbados, Trinidad, and Northern South America, Stratigraphy of. By H. H. Renz. Review by Hubert G. Schenck 92
Barr, K. W., Morton, F., and Richards, A. R. Application of Chemical Analysis of Crude Oils to Problems of Petroleum Geology 1595
Bartram, John G. Report of Committee on Geologic Names and Correlations. The Association Round Table 699
Bates, Fred W., and Wharton, J. B., Jr. Anse La Butte Dome, St. Martin Parish, Louisiana . 1123
Bates, Robert L., and Others. The Oil and Gas Resources of New Mexico. Review by E. Russell Lloyd 1010
Bearing of Foraminifera and Ostracoda on Lower Cretaceous Fredericksburg-Washita Boundary of North Texas. By Frank E. Lozo, Jr. 1060
Beckman, M. W., and Turner, F. E. Stratigraphy and Age of Seguin Formation of Central Texas 608
Bell, Alfred H. Developments in Eastern Interior Coal Basin 814
Big Snowy Group: Lithology and Correlation in Northern Great Plains. By E. S. Berry and L. L. Sloss 1287
Billings, Marland P. Structural Geology. Review by A. J. Eardley 1157
Bloesch, Edward. Memorial of Otto Fischer 1283
Boggs, Frank Shackleford, Jr. Memorial by Roy R. Morse 1029
Book Dealers, Second-Hand. Geological Note by A. I. Levorsen 996
Borden, Joseph L. Developments in Oklahoma in 1942 790
Born, Kendall E., and Wilson, Charles W., Jr. Structure of Central Tennessee 1039
Bowers Field, Montague County, Texas. By Augustus Bart Brown 20
Bramlette, M. N., Woodring, W. P., and Lohman, K. E., Stratigraphy and Paleontology of Santa Maria District, California 1335
Brooks, Benjamin T. Review of Chemical Technology of Petroleum, by William A. Gruse and Donald R. Stevens 652
Brown, Augustus Bart. Bowers Field, Montague County, Texas 20
Burnett, T. J., and Trowbridge, R. M. Developments in East Texas in 1942 782
Business Committee, Minutes of, Texas Hotel, Fort Worth, Texas, April 7, 1943. By E. O. Markham. The Association Round Table 702
———, Report of. By D. Perry Olcott, chairman. The Association Round Table 687
Butte and Shasta Counties, California, East Side Sacramento Valley: Cretaceous. By W. P. Popenoe 306
By-Laws of the Association. The Association Round Table 708

Cable-Tool Drilling Logs, Interpretation of. Geological Note by James F. Swain 997
Calculating the True Thickness of a Folded Bed—Correction. Geological Note by G. D. Hobson 874
California, East Side Sacramento Valley, Shasta and Butte Counties: Cretaceous. By W. P. Popenoe 306
———, Eocene Foraminifera from Type Lodo Formation, Fresno County, By Lois T. Martin. Review by Merle C. Israelsky 1269
———, Eocene Stratigraphy in Santa Ynez Mountains, Santa Barbara County. By Frederic Richard Kelley 1

———, Eocene Stratigraphy of Chico Martinez Creek Area, Kern County. By John F. Curran 1361
———, Geologic Formations and Economic Development of the Oil and Gas Fields of. By Olaf P. Jenkins *et al.* Review by F. M. Van Tuyl and L. W. LeRoy 1393
———, Introduction to Cretaceous of. By Olaf P. Jenkins 249
———, Oil Development Activities in 1942. By George R. Kribbs 862
———, Origin of Radiolarites, and Fracturing of "Fracture Shale" in Santa Maria Basin. Geological Note by Gerard Henny 1622
———, Stratigraphy and Paleontology of Santa Maria District. By W. P. Woodring, M. N. Bramlette, and K. E. Lohman 1335
———, Tertiary Sediments Northeast of Morgan Hill. Geological Note by Charles M. Gilbert 640
———, Upper Cretaceous Stratigraphy of West Side of Sacramento Valley South of Willows, Glenn County. By J. M. Kirby 279
Carlston, Charles W. Notes on the Early History of Water-Well Drilling in the United States. Review by John L. Ferguson 1268
Carolina Bays, Origin of. By Douglas Johnson. Review by John L. Ferguson 654, 874
———. Discussion by Douglas Johnson 1008
Central and Eastern United States, Stratigraphy of. By Charles Schuchert. Review by W. H. Twenhofel 1016
Central Tennessee, Structure of. By Charles W. Wilson, Jr., and Kendall E. Born 1039
Central Texas, Stratigraphy and Age of Seguin Formation of. By M. W. Beckman and F. E. Turner 608
Changes, Wartime, in Petroleum Industry. By Richard J. Gonzalez 970
Chemical Analysis of Crude Oils, Application of, to Problems of Petroleum Geology. By K. W. Barr, F. Morton, and A. R. Richards 1595
Chemical Technology of Petroleum. By William A. Gruse and Donald R. Stevens. Review by Benjamin T. Brooks 652
Cheney, M. G. Division of Geology and Geography, National Research Council. Research Note 1554
———. Research Study Groups and Conferences. Research Note 1552
———. Review of Geomorphology, by O. D. von Engeln 225
Chico Martinez Creek Area, Kern County, California, Eocene Stratigraphy of. By John F. Curran 1361
Civilian Capacities with Government in War Effort, Members of A.A.P.G. in. The Association Round Table 691
Clark, Stuart K. Classification of Faults 1245
———. Reply to Discussion on Classification of Faults, by Chester R. Longwell 1633
Classification of Faults. By Stuart K. Clark 1245
——— of Faults. Discussion by Chester R. Longwell 1633
——— of Faults. Reply by Stuart K. Clark to Discussion by Chester R. Longwell 1640
——— of Oil Reservoirs. Discussion by H. R. Lovely 224
———, Proposed New, of Reservoir Traps, and Stratigraphic Type Oil Fields. Discussion by C. W. Sanders 539
Clifton, R. L. Example of Directional Drilling as Applied to Geology in Ellis County, Kansas. Geological Note 87
Climatic Accidents and Landscape. By C. A. Cotton. Review by Burton Wallace Collins . . 1013
Coal in Southeastern West Virginia. Regional Metamorphism of. By E. T. Heck. 1194
Coast Range of Venezuela, Fossils from Metamorphic Rocks of. Geological Note by Philip P. Wolcott 1632
Cole, Taylor. Embar Field, Andrews County, Texas. Geological Note 538
College Curricula in Petroleum Geology, Report of Committee on. By F. H. Lahee, chairman. The Association Round Table 694
Collins, Burton Wallace. Review of Geomorphology, by C. A. Cotton 551
———. Review of Landscape and Climatic Accidents, by C. A. Cotton 1013
———. Review of Note on the Present Knowledge of the Tertiary Sequence in Papua and the Mandated Territory of New Guinea, by Irene Crespin 1266
———. Review of Physiography of Victoria, by E. Sherbon Hills 652
Committee on Geological Personnel, Organization of. Geological Note by Division of Geology and Geography, National Research Council 1551
——— on War Effort, Geological Society of America, Chester R. Longwell, chairman. Deferment of Scientific and Technical Personnel. Geological Note 1549
——— on War Effort, Geological Society of America, Chester R. Longwell, chairman. New Aid in Handling Personnel Problems in Geology. Geological Note 1548
Conditions, Structural, of Oil and Gas Accumulation in Rocky Mountain Region of United States. By C. E. Dobbin 417

Conferences and Study Groups, Research. Research Note by M. G. Cheney 1552
Conglomerates, Siliceous Dockum, Origin of. By Robert Roth 622
Constitution and By-Laws. The Association Round Table 705
Cooper, G. Arthur, and Warthin, Aldred S., Jr. Traverse Rocks of Thunder Bay Region, Michigan 571
Cores, Large, of Oil Sands, Technique of Testing. By F. B. Plummer and P. F. Tapp . . . 64
Cornell, Lee H. Review of Oil and Gas Field Development in United States, 1941, by National Oil Scouts and Landmen's Association 555
Correlation and Lithology in Northern Great Plains: Big Snowy Group. By F. S. Perry and L. L. Sloss 1287
Coryell, Lewis S. Memorial by Clinton Engstrand 105
Cotton, C. A. Geomorphology. Review by Burton Wallace Collins 551
———. Landscape and Climatic Accidents. Review by Burton Wallace Collins 1013
Crawford, J. G., and Larsen, R. M. Occurrences and Types of Crude Oils in Rocky Mountain Region 1305
Crespin, Irene. Note on the Present Knowledge of the Tertiary Sequence in Papua and the Mandated Territory of New Guinea. Review by Burton Wallace Collins. 1266
Cretaceous: East Side Sacramento Valley, Shasta and Butte Counties, California. By W. P. Popenoe. 306
———, Lower, Fredericksburg-Washita Boundary of North Texas, Bearing of Foraminifera and Ostracoda on. By Frank E. Lozo, Jr. 1060
——— of California, Introduction to. By Olaf P. Jenkins 249
———, Upper, Stratigraphy of West Side of Sacramento Valley South of Willows, Glenn County, California. By J. M. Kirby 279
Cretaceous System, Standard of. By Siemon Wm. Muller and Hubert G. Schenck . . . 262
Croneis, Carey, chairman. Report of Committee on Applications of Geology. The Association Round Table 700
———. Geological "Union Now." Discussion 1001
Crude-Oil Discoveries, Some Factors Influencing Declining Rate of,—The Geologist's Responsibilities in the Present Situation. By L. F. McCollum 960
Crude Oils, Application of Chemical Analysis of, to Problems of Petroleum Geology. By K. W. Barr, F. Morton, and A. R. Richards 1595
———, Occurrences and Types of, in Rocky Mountain Region. By J. G. Crawford and R. M. Larsen 1305
Cunningham, G. M. Memorial of Donald A. Fullerton 240
Curran, John F. Eocene Stratigraphy of Chico Martinez Creek Area, Kern County, California 1361

Dakota Basin of North Dakota, Tertiary Geology and Oil and Gas Prospects in. By Ray V. Hennen 1567
———, Regional Geology of, Discussion by W. C. Howells, Joseph S. Irwin, and Norval Ballard 90
Dallavalle, J. M. Micromeritics, the Technology of Fine Particles. Review by W. C. Krumbein 1163
Decker, Charles E. Three More Graptolites from Simpson of Oklahoma. Geological Note . . 1388
Declining Rate of Crude-Oil Discoveries, Some Factors Influencing,—The Geologist's Responsibilities in the Present Situation. By L. F. McCollum 960
Deep Well in Harrison County, West Virginia, Stratigraphy of. Geological Note by James H. C. Martens 1539
——— in Russell County, Virginia. Geological Note by James H. C. Martens 1543
Deferment of Scientific and Technical Personnel. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1549
Denison, A. Rodger. Medal Award Committee. The Association Round Table 878
———. Sidney Powers Memorial Medal Fund. The Association Round Table 1277
Deposits, Pre-Trinity, in South Texas, Problem of. By F. M. Getzendaner. 1228
Desjardins, Louis. Measurement of Dip Angles on Aerial Photographs. Geological Note . . 1534
———. Review of Aerial Photographs and Their Applications, by H. T. U. Smith 1160
———. Review of Aerial Photographs: Their Use and Interpretation, by A. J. Eardley . . . 95
Desmoinesian, Upper, and Lower Missourian Rocks in Northeastern Oklahoma and Southeastern Kansas. Geological Note by Malcolm C. Oakes and John M. Jewett 632
Development, Economic, and Geologic Formations of the Oil and Gas Fields of California. By Olaf P. Jenkins *et al.* Review by F. M. Van Tuyl and L. W. LeRoy 1393
———, Oil and Gas Field, in United States, 1941. By National Oil Scouts and Landmen's Association. Review by Lee H. Cornell 555
Development and Technology, Petroleum, 1943. By A.I.M.E. Petroleum Division. Review by J. Zaba 1556

Development Activities, Oil, in California, 1942. By George R. Kribbs 862
Developments in Appalachian Area in 1942. By Appalachian Geological Society 835
——— in East Texas in 1942. By R. M. Trowbridge and T. J. Burnett 782
——— in Eastern Interior Basin in 1942. By Alfred H. Bell 814
——— in Michigan in 1942. By H. J. Hardenburg 822
——— in 1942. Gulf Coast of Upper Texas and Louisiana, Review of. By G. J. Smith . . . 730
——— in North Mid-Continent in 1942. By Edward A. Koester 806
——— in Oklahoma in 1942. By Joseph L. Borden 790
——— in Petroleum Geology, 1943, Summary of. By F. M. Van Tuyl. Research Notes . . 1653
——— in Rocky Mountain Region in 1942. By R. M. Larsen 854
——— in South Texas in 1942. By Frith C. Owens and E. A. Taegel 739
——— in Southeastern United States in 1942. By Mississippi Geological Society 990
——— in West Texas and Southeastern New Mexico in 1942. By Robert I. Dickey and Bernerd A. Ray 747
———, New, in North and West-Central Texas, 1942. By North Texas Geological Society . 771
Dickey, Robert I., and Ray, Bernerd A. Developments in West Texas and Southeastern New Mexico in 1942 747
Dip Angles on Aerial Photographs, Measurement of. Geological Note by Louis Desjardins . . 1534
Directional Drilling as Applied to Geology in Ellis County, Kansas, Example of. Geological Note by R. L. Clifton 87
Discoveries, Crude-Oil, Some Factors Influencing Declining Rate of,—The Geologist's Responsibilities in the Present Situation. By L. F. McCollum 960
Discovery Thinking. By A. I. Levorsen 887
Discussion 90, 224, 539, 1001, 1392, 1633
Distinguished Lecture Committee, Report of. By John L. Ferguson, chairman. The Association Round Table 693
Distinguished Lecture Committee Tour. By John L. Ferguson. At Home and Abroad . . . 1565
Division of Geology and Geography in National Research Council, 1942–1943, Report of Representative on. By A. I. Levorson, representative. The Association Round Table . . 698
———. Organization of Committee on Geological Personnel. Geological Note 1551
———. Research Note by M. G. Cheney 1554
Division of Paleontology and Mineralogy. Financial Statement, 1942. The Association Round Table 408
Division of Petroleum, A.I.M.E. Petroleum Development and Technology, 1943. Review by J. Zaba 1556
Dobbin, C. E. Structural Conditions of Oil and Gas Accumulation in Rocky Mountain Region of United States 417
Dockum Conglomerates, Siliceous, Origin of. By Robert Roth 622
Dott, R. H., and Ham, W. E. New Evidence Concerning Age of Spavinaw Granite, Oklahoma. Geological Note 1626
Dreyer, R. M., Jakosky, J. J., and Wilson, Clyde H. Geophysical Investigations in Tri-State Zinc and Lead Mining District. Geological Note 86
Drilling, Directional, as Applied to Geology in Ellis County, Kansas, Example of. Geological Note by R. L. Clifton 87
———, Water-Well, in the United States, Notes on the Early History of. By Charles W. Carlston. Review by John L. Ferguson 1268
———, Wildcat, in 1942. By Frederic H. Lahee 715
Drilling Logs, Cable-Tool, Interpretation of. Geological Note by C. A. Cotton 997
Driver, Herschel L. Economic Paleontology and Mineralogy—An Appraisal 938

Eardley, A. J. Aerial Photographs: Their Use and Interpretation. Review by Louis Desjardins 95
———. Review of Structural Geology, by Marland P. Billings 1157
Early History of Water-Well Drilling in the United States, Notes on. By Charles W. Carlston. Review by John L. Ferguson 1268
East Side Sacramento Valley, Shasta and Butte Counties, California: Cretaceous. By W. P. Popenoe 306
East Texas, Developments in 1942. By R. M. Trowbridge and T. J. Burnett 782
Eastern and Central United States, Stratigraphy of. By Charles Schuchert. Review by W. H. Twenhofel 1016
Eastern Interior Coal Basin, Developments in 1942. By Alfred H. Bell 814
Eastern Mexico, Evidence for Upper Jurassic Landmass in. By Ralph W. Imlay 524
Ecology, Marine, as Related to Paleontology. By Committee, National Research Council Division of Geology and Geography. Review by Harry S. Ladd, chairman 656

Economic Development and Geologic Formations of the Oil and Gas Fields of California. By Olaf P. Jenkins *et al.* Review by F. M. Van Tuyl and L. W. LeRoy 1393
Economic Paleontologists, Society of, Newly Elected Officers. The Association Round Table . 662
Economic Paleontologists and Mineralogists, Society of, American Association of Petroleum Geologists, Society of Exploration Geophysicists. Joint Annual Meeting, Fort Worth, April 7–9, 1943. By F. L. Aurin. The Association Round Table 233, 316
———, Society of, American Association of Petroleum Geologists, and Society of Exploration Geophysicists. Joint Annual Meeting, March 21–23, 1943, Dallas, Texas. Announcement. The Association Round Table 1564
Economic Paleontology and Mineralogy—An Appraisal. By Herschel L. Driver 938
Editor, Report of. By Walter A. Ver Wiebe. The Association Round Table 682
Ehlers, Allen. Williston Basin Wildcat Test, Oliver County, North Dakota. Geological Note . 1618
Ellis County, Kansas, Example of Directional Drilling as Applied to Geology in. Geological Note by R. L. Clifton 87
Embar Field, Andrews County, Texas. Geological Note by Taylor Cole 538
Engstrand, Clinton. Memorial of Lewis S. Coryell 105
Eocene Foraminifera from the Type Lodo Formation. Fresno County, California. By Lois T. Martin. Review by Merle C. Israelsky 1269
Eocene Stratigraphy in Western Santa Ynez Mountains, Santa Barbara County, California. By Frederic Richard Kelley 1
——— of Chico Martinez Creek Area, Kern County, California. By John F. Curran . . . 1361
Erosion of Salt Stock in Gulf Coast Salt Plug in Late Oligocene, Evidence of. Geological Note by Marcus A. Hanna 85
Evidence for Upper Jurassic Landmass in Eastern Mexico. Geological Note by Ralph W. Imlay 524
Evidence, New, Concerning Age of Spavinaw Granite, Oklahoma, Geological Note by W. E. Ham and R. H. Dott 1626
——— of Erosion of Salt Stock in Gulf Coast Salt Plug in Late Oligocene. Geological Note by Marcus A. Hanna 85
Example of Directional Drilling as Applied to Geology in Ellis County, Kansas. Geological Note by R. L. Clifton 87
Experimental and Geophysical Evidence, Recent, of Mechanics of Salt-Dome Formation. By L. L. Nettleton 51
Exploration Geophysicists, Society of, Newly Elected Officers. The Association Round Table . 662
———, Society of, American Association of Petroleum Geologists, Society of Economic Paleontologists and Mineralogists. Joint Annual Meeting, Fort Worth, April 7–9, 1943. By F. L. Aurin. The Association Round Table 233, 316
———, Society of, American Association of Petroleum Geologists, Society of Economic Paleontologists and Mineralogists. Joint Annual Meeting, March 21–23, 1943, Dallas, Texas. Announcement. The Association Round Table 1564

Factors, Some, Influencing Declining Rate of Crude-Oil Discoveries—The Geologist's Responsibilities in the Present Situation. By L. F. McCollum 960
Faults, Classification of, By Stuart K. Clark 1245
Faults, Classification of. Discussion by Chester R. Longwell 1633
Ferguson, John L., chairman. Report of Distinguished Lecture Committee. The Association Round Table 693
———. Distinguished Lecture Committee Tour. At Home and Abroad 1563
———. Review of Notes on the Early History of Water-Well Drilling in the United States, by Charles W. Carlston 1268
———. Review of Review of Petroleum Geology in 1942, by F. M. Van Tuyl *et al.* 1164
———. Review of The Origin of the Carolina Bays, by Douglas Johnson 654, 874
Fettke, Charles R. Memorial of Louis Samuel Panyity 1399
Finances. The Association Round Table 674
Financial Statement, Division of Paleontology and Mineralogy, 1942. The Association Round Table 408
——— for 1942. The Association Round Table 403
Fine Particles, the Technology of, Micromeritics. By J. M. Dallavalle. Review by W. C. Krumbein 1163
Fischer, Otto. Memorial by Edward Bloesch 1283
Folded Bed, Calculating the True Thickness of,—Correction. Geological Note by G. D. Hobson 874
Foraminifera, Eocene, from the Type Lodo Formation, Fresno County, California. By Lois T. Martin. Review by Merle C. Israelsky 1269
Foraminifera and Ostracoda, Bearing of, on Lower Cretaceous Fredericksburg-Washita Boundary of North Texas. By Frank E. Lozo, Jr. 1060

Foreign Maps, War Department Needs. The Association Round Table 1560
Formations, Jurassic, of Gulf Region. By Ralph W. Imlay 1407
Fossils from Metamorphic Rocks of Coast Range of Venezuela. Geological Note by Philip P. Wolcott 1632
Fracture Shale, Fracturing of, and Origin of Radiolarites, in Santa Maria Basin, California. Geological Note by Gerard Henny 1622
Fracturing of "Fracture Shale," and Origin of Radiolarites, in Santa Maria Basin, California. Geological Note by Gerard Henny 1622
Franciscan-Knoxville Problem. By Nicholas L. Taliaferro 109
Fredericksburg-Washita Boundary, Lower Cretaceous, of North Texas, Bearing of Foraminifera and Ostracoda on. By Frank E. Lozo, Jr. 1060
Fresno County, California, Eocene Foraminifera from the Type Lodo Formation. By Lois T. Martin. Review by Merle C. Israelsky 1269
Fullerton, Donald A. Memorial by G. M. Cunningham 240

Gaines and Yoakum Counties, Texas, Wasson Field. By W. T. Schneider 479
Gardner, James H. Review of Geology of Kentucky, by Arthur C. McFarlan 1021
Gas, Natural, and Oil, Regional Geologic Studies for. Geological Note by Hugh D. Miser . 1387
———, Natural Coal, in West Virginia. Geological Note by Paul H. Price and A. J. W. Headlee 529
Gas and Oil Accumulation in Rocky Mountain Region of United States, Structural Conditions of. By C. E. Dobbin 417
Gas and Oil Field Development in United States, 1941. By National Oil Scouts and Landmen's Association. Review by Lee H. Cornell 555
Gas and Oil Fields of California, Geologic Formations and Economic Developments of. By Olaf P. Jenkins *et al.* Review by F. M. Van Tuyl and L. W. LeRoy 1393
Gas and Oil Prospects and Tertiary Geology in Dakota Basin of North Dakota. By Ray V. Hennen 1567
Gas and Oil Resources of New Mexico. By Robert L. Bates and Others. Review by E. Russell Lloyd 1010
Geographic Distribution of Members. The Association Round Table 676
Geography and Geology, Division of, National Research Council. Research Note by M. G. Cheney 1554
Geologic Formations and Economic Development of the Oil and Gas Fields of California. By Olaf P. Jenkins *et al.* Review by F. M. Van Tuyl and L. W. LeRoy 1393
Geologic Names and Correlations, Report of Committee on. By John G. Bartram, chairman. The Association Round Table 699
Geologic Studies, Regional, for Oil and Natural Gas. Geological Note by Hugh D. Miser . . 1387
Geological Departments in Petroleum Industry, Open Letter to. By F. L. Aurin. The Association Round Table 233
Geological Notes 85, 220, 524, 632, 874, 996, 1387, 1534, 1618
Geological Personnel, Organization of Committee on. Geological Note 1551
Geological Society of America, Chester R. Longwell, chairman, Committee on War Effort. Deferment of Scientific and Technical Personnel. Geological Note 1549
———. New Aid in Handling Personnel Problems in Geology. Geological Note 1548
Geological "Union Now." Discussion by Carey Croneis 1001
Geologist, The Petroleum, and the War. By Fritz L. Aurin 929
Geologist's Responsibilities in the Present Situation—Some Factors Influencing Declining Rate of Crude-Oil Discoveries. By L. F. McCollum 960
Geologists Will Be Deferred from Military Service. By K. C. Heald. The Association Round Table 1278
Geology in Ellis County, Kansas, Example of Directional Drilling as Applied to. Geological Note by R. L. Clifton 87
Geology, New Aid in Handling Personnel Problems in. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1548
——— of Kentucky. By Arthur C. McFarlan. Review by James H. Gardner 1021
———, Petroleum, Application of Chemical Analysis of Crude Oils to Problems of. By K. W. Barr, F. Morton, and A. R. Richards 1595
———, Petroleum, Review of, in 1942. By F. M. Van Tuyl *et al.* Review by John L. Ferguson 1164
———, Regional, of Dakota Basin. Discussion by W. C. Howells, Joseph S. Irwin, and Norval Ballard 90
———, Relation of, to Occurrence of Ground Water in Houston District, Texas. By Nicholas A. Rose 1081
———, Report of Committee on Applications of. By Carey Croneis, chairman. The Association Round Table 700

———, Structural. By Marland P. Billings. Review by A. J. Eardley 1157
———, Tertiary, and Oil and Gas Prospects in Dakota Basin of North Dakota. By Ray V. Hennen 1567
Geology and Geography, Division of, National Research Council, Report of Representative on, 1942–1943. By A. I. Levorsen, representative. The Association Round Table . . . 698
———, Division of, National Research Council. Research Note by M. G. Cheney. . . . 1554
Geology Students, Survey of. Research Note by A. I. Levorsen 651
Geomorphology. By C. A. Cotton. Review by Burton Wallace Collins 551
———. By Norman E. A. Hinds. Review by Henry A. Ley 1019
———. By O. D. von Engeln. Review by M. G. Cheney 225
Geophysical and Experimental Evidence, Recent, of Mechanics of Salt-Dome Formation. By L. L. Nettleton 51
Geophysical Investigations in Tri-State Zinc and Lead Mining District. Geological Note by J. J. Jakosky, R. M. Dreyer, and Clyde H. Wilson 86
Geophysical Prospecting, Maintaining an Adequate Level of. By Frank Goldstone . . . 948
Gester, G. C. Memorial of Jorgen O. Nomland 1030
Getzendaner, F. M. Problem of Pre-Trinity Deposits in South Texas 1228
Gilbert, Charles M. Tertiary Sediments Northeast of Morgan Hill, California. Geological Note. 640
Gillette, Tracy. Memorial by Joseph T. Singewald, Jr. 238
Glenn County, California, Upper Cretaceous Stratigraphy of West Side of Sacramento Valley South of Willows. By J. M. Kirby 279
Goldstone, Frank. Maintaining an Adequate Level of Geophysical Prospecting 948
Gonzalez, Richard J. Wartime Changes in Petroleum Industry 970
Granite, Spavinaw, Oklahoma, New Evidence Concerning Age of. Geological Note by W. E. Ham and R. H. Dott 1626
Grant, Carroll W., ZoBell, Claude E., and Haas, Herbert F. Marine Microörganisms Which Oxidize Petroleum Hydrocarbons 1175
Graptolites from Simpson of Oklahoma, Three More. Geological Note by Charles E. Decker 1388
Great Plains, Northern, Lithology and Correlation in: Big Snowy Group. By E. S. Perry and L. L. Sloss 1287
Gries, John Paul. Two Deep Water Wells near Rapid City, South Dakota. Geological Note 646
Ground Water and Relation of Geology to Its Occurrence in Houston District, Texas. By Nicholas A. Rose 1081
Gruse, William A., and Stevens, Donald R. Chemical Technology of Petroleum. Review by Benjamin T. Brooks 652
Gulf Coast of Upper Texas and Louisiana, Review of Developments in 1942. By G. J. Smith 730
Gulf Coast Salt Plug, Evidence of Erosion of Salt Stock in, Late Oligocene. Geological Note by Marcus A. Hanna 85
Gulf Coastal Plain, Southeastern, Subsurface Stratigraphy and Lithology of Tuscaloosa Formation in. By Arthur C. Munyan 596
Gulf Region, Jurassic Formations of. By Ralph W. Imlay. 1407

Haas, Herbert F., ZoBell, Claude E., and Grant, Carroll W. Marine Microörganisms Which Oxidize Petroleum Hydrocarbons 1175
Ham, W. E. and Dott, R. H. New Evidence Concerning Age of Spavinaw Granite, Oklahoma, Geological Note 1626
Handling Personnel Problems in Geology, New Aid in. Geological Note by Committee on War Effort, Geological Society of America 1548
Hanna, Marcus A. Evidence of Erosion of Salt Stock in Gulf Coast Salt Plug in Late Oligocene. Geological Note 85
Hardenberg, H. J. Developments in Michigan in 1942. 822
Harrison County, West Virginia, Stratigraphy of Deep Well in. Geological Note by James H. C. Martens 1539
Haynes, W. P. Memorial of Fred Hall Kay 1561
Headlee, A. J. W., and Price, Paul H. Natural Coal Gas in West Virginia. Geological Note . 529
Heald, K. C. Geologists Will Be Deferred from Military Service. The Association Round Table 1278
Heck, E. T. Regional Metamorphism of Coal in Southeastern West Virginia 1194
Hennen, Ray V. Tertiary Geology and Oil and Gas Prospects in Dakota Basin of North Dakota 1567
Henny, Gerard. Origin of Radiolarites, and Fracturing of "Fracture Shale" in Santa Maria Basin, California. Geological Note 1622
Herold, Stanley C. Memorial of Kenneth Allen Johnston 104

Heroy, W. B. Analysis of Membership of American Association of Petroleum Geologists. The Association Round Table 1559
———. Reserves in Action 954
Hills, E. Sherbon. Physiography of Victoria. Review by Burton Wallace Collins 652
Hinds, Norman E. A. Geomorphology. Review by Henry A. Ley 1019
History, Early, of Water-Well Drilling in the United States, Notes on. By Charles W. Carlston. Review by John L. Ferguson 1268
Hobson, G. D. Calculating the True Thickness of a Folded Bed—Correction. Geological Note 874
Hollingsworth, R. V. Review of Pennsylvanian System in New Mexico, by M. L. Thompson 1158
Houston District, Texas, Ground Water and Relation of Geology to Its Occurrence in. By Nicholas A. Rose 1081
Howell, J. V., chairman. Report of Committee for Publication. The Association Round Table 701
Howells, W. C., Irwin, Joseph S., and Ballard, Norval. Regional Geology of Dakota Basin. Discussion 90
Hydrocarbons, Petroleum, Marine Microörganisms Which Oxidize. By Claude E. ZoBell, Carroll W. Grant, and Herbert F. Haas 1175

Imlay, Ralph W. Evidence for Upper Jurassic Landmass in Eastern Mexico 524
———. Jurassic Formations of Gulf Region 1407
Interpretation of Cable-Tool Drilling Logs. Geological Note by James F. Swain 997
Interpretation and Use of Aerial Photographs. By A. J. Eardley. Review by Louis Desjardins 95
Introduction to Cretaceous of California. By Olaf P. Jenkins 249
Investigations, Geophysical, in Tri-State Zinc and Lead Mining District. Geological Note by J. J. Jakosky, R. M. Dreyer, and Clyde H. Wilson 86
Irwin, Joseph S., Howells, W. C., and Ballard, Norval. Regional Geology of Dakota Basin. Discussion 90
Israelsky, Merle C. Review of Eocene Foraminifera from the Type Lodo Formation, Fresno County, California. By Lois T. Martin 1269

Jakosky, J. J., Dreyer, R. M., and Wilson, Clyde H. Geophysical Investigations in Tri-State Zinc and Lead Mining District. Geological Note 86
Jenkins, Olaf P. Introduction to Cretaceous of California 249
Jenkins, Olaf P., *et al.* Geologic Formations and Economic Development of the Oil and Gas Fields of California. Review by F. M. Van Tuyl and L. W. LeRoy 1393
Jennings Field, Acadia Parish, Louisiana, Subsurface Study of. By C. B. Roach 1102
Jewett, John M., and Oakes, Malcolm C. Upper Desmoinesian and Lower Missourian Rocks in Northeastern Oklahoma and Southeastern Kansas. Geological Note 632
Johnson, Douglas. Origin of the Carolina Bays. Discussion 1008
———. The Origin of the Carolina Bays. Review by John L. Ferguson 654, 874
Johnston, Kenneth Allen. Memorial by Stanley C. Herold 104
Joint Annual Meeting, Fort Worth, April 7–9, 1943. By F. L. Aurin. The Association Round Table 233, 316
Jurassic, Upper, Landmass in Eastern Mexico, Evidence for. Geological Note by Ralph W. Imlay 524
Jurassic Formations of Gulf Region. By Ralph W. Imlay 1407

Kansas, Example of Directional Drilling as Applied to Geology in Ellis County. Geological Note by R. L. Clifton. 87
———, Southeastern and Northeastern Oklahoma, Upper Desmoinesian and Lower Missourian Rocks in. Geological Note by Malcolm C. Oakes and John M. Jewett. . . . 632
Kay, Fred Hall. Memorial by W. P. Haynes 1561
Keeler, William Weaver. Memorial by B. Rixleben 564
Kelley, Frederic Richard. Eocene Stratigraphy in Santa Ynez Mountains, Santa Barbara County, California 1
Kentucky, Geology of. By Arthur C. McFarlan. Review by James H. Gardner 1021
Kern County, California, Eocene Stratigraphy of Chico Martinez Creek Area. By John F. Curran 1361
Kirby, J. M. Upper Cretaceous Stratigraphy of West Side of Sacramento Valley South of Willows, Glenn County, California 279
Knoxville-Franciscan Problem. By Nicholas L. Taliaferro 109
Koester, Edward A. Developments in North Mid-Continent in 1942 806
Kribbs, George R. Oil Development Activities in California, 1942 862
Krumbein, W. C. Review of Micromeritics, the Technology of Fine Particles, by J. M. Dallavalle 1163

Kummel, Bernhard, Jr. New Technique for Measurement of Stratigraphic Units. Geological Note . . . 220

Ladd, Harry S., chairman. Review of Marine Ecology as Related to Paleontology, by Committee, National Research Council Division of Geology and Geography . . . 656
Lahee, F. H., chairman. Report of Committee on College Curricula in Petroleum Geology. The Association Round Table . . . 694
———. Wildcat Drilling in 1942 . . . 715
Landscape and Climatic Accidents. By C. A. Cotton. Review by Burton Wallace Collins . . 1013
Larsen, R. M. Developments in Rocky Mountain Region in 1942 . . . 854
Larsen, R. M., and Crawford, J. G. Occurrences and Types of Crude Oils in Rocky Mountain Region . . . 1305
Lead and Zinc Mining District, Tri-State, Geophysical Investigations in. Geological Note by J. J. Jakosky, R. M. Dreyer, and Clyde H. Wilson . . . 86
Lecture Committee, Distinguished, Report of. By John L. Ferguson, chairman. The Association Round Table . . . 693
Lecture Committee Tour, Distinguished. By John L. Ferguson. At Home and Abroad . . 1565
Levorsen, A. I. Discovery Thinking . . . 887
———. Report of Chairman of Research Committee. The Association Round Table . . . 697
———, representative. Report of Representative on Division of Geology and Geography in National Research Council, 1942–1943. The Association Round Table . . . 698
———. Second-Hand Book Dealers. Geological Note . . . 996
———. Survey of Geology Students. Research Note . . . 651
Ley, Henry A. Review of Geomorphology, by Norman E. A. Hinds . . . 1019
List of Professional and Scientific Occupations . . . 1550
Lithology and Correlation in Northern Great Plains; Big Snowy Group. By E. S. Perry and L. L. Sloss . . . 1287
Lithology and Subsurface Stratigraphy of Tuscaloosa Formation in Southeastern Gulf Coastal Plain. By Arthur C. Munyan . . . 596
Lloyd, E. Russell. Review of the Oil and Gas Resources of New Mexico, by Robert L. Bates and Others . . . 1010
Lodo Formation, Type, Eocene Foraminifera from, Fresno County, California. By Lois T. Martin. Review by Merle C. Israelsky . . . 1269
Logs, Cable-Tool Drilling, Interpretation of. Geological Note by James F. Swain . . . 997
Lohman, K. E., Woodring, W. P., and Bramlette, M. N. Stratigraphy and Paleontology of Santa Maria District, California . . . 1335
Longwell, Chester R. Classification of Faults. Discussion . . . 1633
———, chairman, Committee on War Effort, Geological Society of America. Deferment of Scientific and Technical Personnel. Geological Note . . . 1549
———. New Aid in Handling Personnel Problems in Geology. Geological Note . . . 1548
Louisiana, Anse La Butte Dome, St. Martin Parish. By Fred W. Bates and J. B. Wharton, Jr. 1123
———, Subsurface Study of Jennings Field, Acadia Parish. By C. B. Roach . . . 1102
Louisiana and Texas, Upper, Gulf Coast of, Review of Developments in 1942. By G. J. Smith 730
Lovely, H. R. Classification of Oil Reservoirs. Discussion . . . 224
Lower Cretaceous Fredericksburg-Washita Boundary of North Texas, Bearing of Foraminifera and Ostracoda on. By Frank E. Lozo, Jr. . . . 1060
Lower Missourian and Upper Desmoinesian Rocks in Northeastern Oklahoma and Southeastern Kansas. Geological Note by Malcolm C. Oakes and John M. Jewett . . . 632
Lozo, Frank E., Jr. Bearing of Foraminifera and Ostracoda on Lower Cretaceous Fredericksburg-Washita Boundary of North Texas . . . 1060

McCollum, L. F. Some Factors Influencing Declining Rate of Crude-Oil Discoveries—The Geologist's Responsibilities in the Present Situation . . . 960
McFarlan, Arthur C. Geology of Kentucky. Review by James H. Gardner . . . 1021
MacNeil, Donald J. Stratigraphy and Structure of Moose Mountain Area, Alberta . . . 38
Maintaining an Adequate Level of Geophysical Prospecting. By Frank Goldstone . . . 948
Mandated Territory of New Guinea and Papua. Note on Present Knowledge of the Tertiary Sequence in. By Irene Crespin. Review by Burton Wallace Collins . . . 1266
Manpower Problems of Petroleum Geologists. The Association Round Table . . . 691
Maps, Foreign, War Department Needs. The Association Round Table . . . 1560
Marine Ecology as Related to Paleontology. By Committee, National Research Council Division of Geology and Geography. Review by Harry S. Ladd, chairman . . . 656
Marine Microörganisms Which Oxidize Petroleum Hydrocarbons. By Claude E. ZoBell, Carroll W. Grant, and Herbert F. Haas . . . 1175

Markham, E. O. Minutes of Business Committee, Fort Worth, Texas, April 7, 1943. Report of. The Association Round Table 702
———. Minutes, Twenty-Eighth Annual Business Meeting, Hotel Texas, Fort Worth, Texas, April 8–9, 1943. The Association Round Table 670
———. Report of Secretary-Treasurer. The Association Round Table 674
Martens, James H. C. Deep Well in Russell County, Virginia. Geological Note 1543
———. Stratigraphy of Deep Well in Harrison County, West Virginia. Geological Note . . 1539
Martin, George C. Memorial by Philip S. Smith 1280
Martin, Lois T. Eocene Foraminifera from the Type Lodo Formation, Fresno County, California. Review by Merle C. Israelsky 1269
Martinez Chico Creek Area, Kern County, California, Eocene Stratigraphy of. By John F. Curran 1361
Measurement of Dip Angles on Aerial Photographs. Geological Note by Louis Desjardins . 1534
——— of Stratigraphic Units, New Technique for. Geological Note by Bernhard Kummel, Jr. 220
Mechanics of Salt-Dome Formation, Recent Experimental and Geophysical Evidence of. By L. L. Nettleton 51
Medal Award Committee. By A. Rodger Denison. The Association Round Table 878
———. The Association Round Table 704
Medal Fund, Sidney Powers Memorial. By A. Rodger Denison. The Association Round Table 1277
Members, Geographic Distribution of. The Association Round Table 676
——— in the Armed Forces. The Association Round Table 232
——— of A.A.P.G. in Armed Forces. The Association Round Table 690
——— of A.A.P.G. in Civilian Capacities with Government in War Effort. The Association Round Table 691
Membership of American Association of Petroleum Geologists, Analysis of. By W. B. Heroy. The Association Round Table 1559
Membership Applications 101, 229, 313, 560, 713, 875, 1025, 1168, 1273, 1397, 1646
Membership List, Association, March 1, 1943. The Association Round Table 323
———, Supplementary, September 4, 1943. The Association Round Table. 1275
Memorandum of National Service Committee. By F. L. Aurin. The Association Round Table 412
Memorial 104, 238, 564, 1027, 1169, 1279, 1399, 1561
Memorial Medal Fund, Sidney Powers 1651
———. By A. Rodger Denison. The Association Round Table 1277
Merit Award, Student, West Texas Geological Society. The Association Round Table . . 659
Metamorphic Rocks of Coast Range of Venezuela, Fossils from. Geological Note by Philip P. Wolcott 1632
Metamorphism of Coal, Regional, in Southeastern West Virginia. By E. T. Heck 1194
Mexico, Eastern, Evidence for Upper Jurassic Landmass in. Geological Note by Ralph W. Imlay 524
Michigan, Developments in 1942. By H. J. Hardenberg 822
———, Traverse Rocks of Thunder Bay Region. By Aldred S. Warthin, Jr. and G. Arthur Cooper 571
Micromeritics, the Technology of Fine Particles. By J. M. Dallavalle. Review by W. C. Krumbein 1163
Microörganisms, Marine, Which Oxidize Petroleum Hydrocarbons. By Claude E. ZoBell, Carroll W. Grant, and Herbert F. Haas 1175
Military Service, Geologists Will Be Deferred from. By K. C. Heald. The Association Round Table 1278
Mineralogy and Economic Paleontology—An Appraisal. By Herschel L. Driver 938
Minutes of Business Committee, Texas Hotel, Fort Worth, Texas, April 7, 1943. By E. O. Markham. The Association Round Table 702
———, Twenty-Eighth Annual Business Meeting, Hotel Texas, Fort Worth, Texas, April 8–9, 1943. By Edmond O. Markham. The Association Round Table 670
Miser, Hugh D. Regional Geologic Studies for Oil and Natural Gas. Geological Note . . . 1387
Mississippi Geological Society. Developments in Southeastern United States in 1942 . . . 990
Missourian, Lower, and Upper Desmoinesian Rocks in Northeastern Oklahoma and Southeastern Kansas. Geological Note by Malcolm C. Oakes and John M. Jewett 632
Montague County, Texas, Bowers Field. By Augustus Bart Brown 20
Moose Mountain Area, Alberta, Stratigraphy and Structure of. By Donald J. MacNeil . . 38
Morgan Hill, California, Tertiary Sediments Northeast of. Geological Note by Charles M. Gilbert 640
Morse, Roy R. Memorial of Frank Shackleford Boggs, Jr. 1029
Morton, F., Barr, K. W., and Richards, A. R. Application of Chemical Analysis of Crude Oils to Problems of Petroleum Geology 1595

Muller, Siemon Wm., and Schenck, Hubert G. Standard of Cretaceous System 262
Munyan, Arthur C. Subsurface Stratigraphy and Lithology of Tuscaloosa Formation in Southeastern Gulf Coastal Plain 596

National Oil Scouts and Landmen's Association. Oil and Gas Development in United States, 1941. Review by Lee H. Cornell 555
National Research Council, Division of Geology and Geography. Organization of Committee on Geological Personnel. Geological Note 1551
———, Division of Geology and Geography. Research Note by M. G. Cheney 1554
———, Division of Geology and Geography Committee. Marine Ecology as Related to Paleontology. Review by Harry S. Ladd, chairman 656
———, Report of Representative on Division of Geology and Geography in, 1942–1943. By A. I. Levorsen, representative. The Association Round Table 698
National Service Committee, Memorandum of. By F. L. Aurin. The Association Round Table 412
———, Report of. By F. L. Aurin, chairman. The Association Round Table 688
Natural Coal Gas in West Virginia. Geological Note by Paul H. Price and A. J. W. Headlee . 529
Natural Gas and Oil, Regional Geologic Studies for. Geological Note by Hugh D. Miser . . 1387
Nettleton, L. L. Recent Experimental and Geophysical Evidence of Mechanics of Salt-Dome Formation 51
New Aid in Handling Personnel Problems in Geology. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1548
New Classification of Reservoir Traps, Proposed, and Stratigraphic Type Oil Fields. Discussion by C. W. Sanders 539
New Developments in North and West-Central Texas, 1942. By North Texas Geological Society 771
New Evidence Concerning Age of Spavinaw Granite, Oklahoma. Geological Note by W. E. Ham and R. H. Dott 1626
New Mexico, Oil and Gas Resources of. By Robert L. Bates and Others. Review by E. Russell Lloyd 1010
———, Onondagan Equivalent in. Geological Note by Frank V. Stevenson 222
———, Pennsylvanian System in. By M. L. Thompson. Review by R. V. Hollingsworth . 1158
———, Southeastern, and West Texas, Developments in 1942. By Robert I. Dickey and Bernerd A. Ray 747
New Technique for Measurement of Stratigraphic Units. Geological Note by Bernhard Kummel, Jr. 220
Newly Elected Officers. American Association of Petroleum Geologists. The Association Round Table 662
———, Society of Economic Paleontologists and Mineralogists. The Association Round Table 662
———, Society of Exploration Geophysicists. The Association Round Table 662
Nomland, Jorgen O. Memorial by G. C. Gester 1030
North and West-Central Texas, New Developments in, 1942. By North Texas Geological Society 771
North Dakota, Tertiary Geology and Oil and Gas Prospects in Dakota Basin of. By Ray V. Hennen 1567
———, Williston Basin Wildcat Test, Oliver County. Geological Note by Allen Ehlers . . 1618
North Mid-Continent, Developments in 1942. By Edward A. Koester 806
North Texas, Bearing of Foraminifera and Ostracoda on Lower Cretaceous Fredericksburg-Washita Boundary of. By Frank E. Lozo, Jr. 1060
North Texas Geological Society. New Developments in North and West-Central Texas, 1942 771
Northeastern Oklahoma and Southeastern Kansas, Upper Desmoinesian and Lower Missourian Rocks in. Geological Note by Malcolm C. Oakes and John M. Jewett 632
Northern Great Plains, Lithology and Correlation in: Big Snowy Group. By E. S. Perry and L. L. Sloss 1287
Northern South America, Trinidad, and Barbados, Stratigraphy of. By H. H. Renz. Review by Hubert G. Schenck 92
Note on Present Knowledge of the Tertiary Sequence in Papua and the Mandated Territory of New Guinea. By Irene Crespin. Review by Burton Wallace Collins 1266
Notes on the Early History of Water-Well Drilling in the United States. By Charles W. Carlston. Review by John L. Ferguson 1268

Oakes, Malcolm C., and Jewett, John M. Upper Desmoinesian and Lower Missourian Rocks in Northeastern Oklahoma and Southeastern Kansas. Geological Note 632
Occurrences and Types of Crude Oils in Rocky Mountain Region. By J. G. Crawford and R. M. Larsen 1305

Officers Elected at Twenty-Eighth Annual Meeting, Fort Worth, Texas. The Association Round Table 662
———, Newly Elected, Society of Economic Paleontologists and Mineralogists. The Association Round Table 662
———, Newly Elected, Society of Exploration Geophysicists. The Association Round Table 662
——— of the Association, Past and Present. The Association Round Table 316
Oil and Gas Accumulation in Rocky Mountain Region of United States, Structural Conditions of. By C. E. Dobbin 417
Oil and Gas Field Development in United States, 1941. By National Oil Scouts and Landmen's Association. Review by Lee H. Cornell 555
Oil and Gas Fields of California, Geologic Formations and Economic Development of. By Olaf P. Jenkins *et al.* Review by F. M. Van Tuyl and L. W. LeRoy 1393
Oil and Gas Prospects and Tertiary Geology in Dakota Basin of North Dakota. By Ray V. Hennen 1567
Oil and Gas Resources of New Mexico. By Robert L. Bates and Others. Review by E. Russell Lloyd 1010
Oil and Natural Gas, Regional Geologic Studies for. Geological Note by Hugh D. Miser . . 1387
Oil Development Activities in California, 1942. By George R. Kribbs 862
Oil Fields, Stratigraphic Type. Discussion by C. W. Sanders 1392
———, Stratigraphic Type, and Proposed New Classification of Reservoir Traps. Discussion by C. W. Sanders 539
Oil Reservoirs, Classification of. Discussion by H. R. Lovely 224
Oil Sands, Technique of Testing Large Cores of. By F. B. Plummer and P. F. Tapp . . . 64
Oils, Crude, Application of Chemical Analysis of, to Problems of Petroleum Geology. By K. W. Barr, F. Morton, and A. R. Richards 1595
———, Crude, in Rocky Mountain Region, Occurrences and Types of. By J. G. Crawford and R. M. Larsen 1305
Oklahoma, Developments in 1942. By Joseph L. Borden 790
Oklahoma, New Evidence Concerning Age of Spavinaw Granite. Geological Note by W. E. Ham and R. H. Dott 1626
———, Northeastern, and Southeastern Kansas, Upper Desmoinesian and Lower Missourian Rocks in. Geological Note by Malcolm C. Oakes and John M. Jewett . . . 632
———, Three More Graptolites from Simpson of. Geological Note by Charles E. Decker . . 1388
Olcott, D. Perry, chairman. Report of Business Committee. The Association Round Table . 687
Oligocene, Late, Evidence of Erosion of Salt Stock in Gulf Coast Salt Plug in. Geological Note by Marcus A. Hanna 85
Oliver County, North Dakota, Williston Basin Wildcat Test. Geological Note by Allen Ehlers 1618
Onondagan Equivalent in New Mexico. Geological Note by Frank V. Stevenson 222
Open Letter to Geological Departments in Petroleum Industry. By F. L. Aurin. The Association Round Table 233
Organization of Committee on Geological Personnel. Geological Note by Division of Geology and Geography, National Research Council 1551
Origin of Radiolarites, and Fracturing of "Fractured Shale" in Santa Maria Basin, California. Geological Note by Gerard Henny 1622
——— of Siliceous Dockum Conglomerates. By Robert Roth 622
——— of the Carolina Bays. By Douglas Johnson. Review by John L. Ferguson . . . 654, 874
——— of the Carolina Bays. Discussion by Douglas Johnson 1008
Ostracoda and Foraminifera, Bearing of, on Lower Cretaceous Fredericksburg-Washita Boundary of North Texas. By Frank E. Lozo, Jr. 1060
Owens, Frith C. Memorial of John W. Reiss 1279
Owens, Frith C., and Taegel, E. A. Developments in South Texas in 1942 739

Pacific Section Annual Meeting, October 15, 1943, Ambassador Hotel, Los Angeles, California. The Association Round Table 1559
———, Titles of Papers. The Association Round Table 1559
Paleontology, Economic, and Mineralogy,—An Appraisal. By Herschel L. Driver . . . 938
———, Marine Ecology as Related to. By Committee, National Research Council Division of Geology and Geography. Review by Harry S. Ladd, chairman 656
Paleontology and Mineralogy, Division of. Financial Statement, 1942. The Association Round Table 408
Paleontology and Stratigraphy of Santa Maria District, California. By W. P. Woodring, M. N. Bramlette, and K. E. Lohman 1335
Panyity, Louis Samuel. Memorial by Charles R. Fettke 1399
Papers, Titles of, Annual Association Meeting, Fort Worth, Texas, April 7–9, 1943. The Association Round Table 664
Papers, Titles of, Pacific Section Annual Meeting. The Association Round Table 1559

Papua and Mandated Territory of New Guinea, Note on Present Knowledge of the Tertiary Sequence in. By Irene Crespin. Review by Burton Wallace Collins 1266
Particles, Fine, the Technology of, Micromeritics. By J. M. Dallavalle. Review by W. C. Krumbein 1163
Past and Present Officers of the Association. The Association Round Table 316
Pennsylvanian System in New Mexico. By M. L. Thompson. Review by R. V. Hollingsworth 1158
Perry, E. S., and Sloss, L. L. Big Snowy Group: Lithology and Correlation in Northern Great Plains 1287
Personnel, Geological, Organization of Committee on. Geological Note by Division of Geology and Geography, National Research Council 1551
———, Scientific and Technical, Deferment of. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1549
Personnel Problems in Geology, New Aid in Handling. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1548
Petroleum, Chemical Technology of. By William A. Gruse and Donald R. Stevens. Review by Benjamin T. Brooks 652
Petroleum Development and Technology, 1943. By A. I. M. E. Petroleum Division. Review by J. Zaba 1556
Petroleum Division, A. I. M. E. Petroleum Development and Technology, 1943. Review by J. Zaba 1556
Petroleum Geologist, The, and the War. By Fritz L. Aurin 929
Petroleum Geologists, Manpower Problems of. The Association Round Table 691
Petroleum Geology, Application of Chemical Analysis of Crude Oils to Problems of. By K. W. Barr, F. Morton, and A. R. Richards 1595
———, Report of Committee on College Curricula in. By F. H. Lahee, chairman. The Association Round Table 694
———, Review of, in 1942. By F. M. Van Tuyl *et al.* Review by John L. Ferguson . . . 1164
Petroleum Hydrocarbons, Marine Microörganisms Which Oxidize. By Claude E. ZoBell, Carroll W. Grant, and Herbert F. Haas 1175
Petroleum Industry, Open Letter to Geological Departments in. By F. L. Aurin. The Association Round Table 233
———, Wartime Changes in. By Richard J. Gonzalez 970
Photographs, Aerial, and Their Applications. By H. T. U. Smith. Review by Louis Desjardins 1160
———, Aerial, Measurement of Dip Angles on. Geological Note by Louis Desjardins . . . 1534
———, Aerial: Their Use and Interpretation. By A. J. Eardley. Review by Louis Desjardins 95
Physiography of Victoria. By E. Sherbon Hills. Review by Burton Wallace Collins . . . 652
Plummer, F. B., and Tapp, P. F. Technique of Testing Large Cores of Oil Sands 64
Popenoe, W. P. Cretaceous: East Side Sacramento Valley, Shasta and Butte Counties, California 306
Powers, Sidney, Memorial Medal Award of the American Association of Petroleum Geologists, Rules for. The Association Round Table 879
———, Memorial Medal Fund 1651
———, Memorial Medal Fund. By A. Rodger Denison. The Association Round Table . . 1277
Pratt, Wallace E. Memorial of William McCormick Reid 1031
Present Knowledge of the Tertiary Sequence in Papua and the Mandated Territory of New Guinea, Note on. By Irene Crespin. Review by Burton Wallace Collins 1266
President, Report of. By F. L. Aurin. The Asssociation Round Table 671
Presidential and Special Addresses Given before Joint Sessions, Titles of. The Association Round Table 665
Pre-Trinity Deposits in South Texas, Problem of. By F. M. Getzendaner 1228
Price, Paul H., chairman. Report of Resolutions Committee. The Association Round Table . 686
Price, Paul H., and Headlee, A. J. W. Natural Coal Gas in West Virginia. Geological Note . 529
Problem of Pre-Trinity Deposits in South Texas. By F. M. Getzendaner 1228
Problems in Geology, Personnel, New Aid in Handling. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1548
——— of Petroleum Geology, Application of Chemical Analysis of Crude Oils to. By K. W. Barr, F. Morton, and A. R. Richards 1595
Professional and Scientific Occupations, List of 1550
Proposed New Classification of Reservoir Traps and Stratigraphic Type Oil Fields. Discussion by C. W. Sanders 539
Prospecting, Geophysical, Maintaining an Adequate Level of. By Frank Goldstone 948
Prospects, Oil and Gas, and Tertiary Geology in Dakota Basin of North Dakota. By Ray V. Hennen 1567
Publication, Report of Committee for. By J. V. Howell, chairman. The Association Round Table 701
Publications, Special. The Association Round Table 682

Radiolarites, Origin of, and Fracturing of "Fractured Shale" in Santa Maria Basin, California. Geological Note by Gerard Henny 1622
Rate of Crude-Oil Discoveries, Declining, Some Factors Influencing,—The Geologist's Responsibilities in the Present Situation. By L. F. McCollum 960
Ray, Bernerd A., and Dickey, Robert I. Developments in West Texas and Southeastern New Mexico in 1942 747
Recent Experimental and Geophysical Evidence of Mechanics of Salt-Dome Formation. By L. L. Nettleton 51
Recent Publications 98, 226, 555, 657, 1021, 1165, 1270, 1395, 1558, 1643
Regional Geologic Studies for Oil and Natural Gas. Geological Note by Hugh D. Miser . . 1387
Regional Geology of Dakota Basin. Discussion by W. C. Howells, Joseph S. Irwin, and Norval Ballard 90
Regional Metamorphism of Coal in Southeastern West Virginia. By E. T. Heck 1194
Reid, William McCormick. Memorial by Wallace E. Pratt 1031
Reiss, John W. Memorial by Frith C. Owens 1279
Relation of Geology to Occurrence of Ground Water in Houston District, Texas. By Nicholas A. Rose 1081
Renz, H. H. Stratigraphy of Northern South America, Trinidad, and Barbados. Review by Hubert G. Schenck 92
Report of Business Committee. By D. Perry Olcott, chairman. The Association Round Table 687
——— of Chairman of Research Committee. By A. I. Levorsen. The Association Round Table 697
——— of Committee for Publication. By J. V. Howell, chairman. The Association Round Table 701
——— of Committee on Applications of Geology. By Carey Croneis, chairman. The Association Round Table 700
——— of Committee on College Curricula in Petroleum Geology. By F. H. Lahee, chairman. The Association Round Table 694
——— of Committee on Geologic Names and Correlations. By John G. Bartram, chairman. The Association Round Table 699
——— of Distinguished Lecture Committee. By John L. Ferguson, chairman. The Association Round Table 693
——— of Editor. By Walter A. Ver Wiebe. The Association Round Table 682
——— of National Service Committee. By F. L. Aurin, chairman. The Association Round Table 688
——— of President. By F. L. Aurin. The Association Round Table 671
——— of Representative on Division of Geology and Geography of National Research Council 1942–1943. By A. I. Levorsen, representative. The Association Round Table 698
——— of Resolutions Committee. By Paul H. Price, chairman. The Association Round Table 686
——— of Secretary-Treasurer. By Edmond O. Markham. The Association Round Table . 674
Representative on Division of Geology and Geography in National Research Council, 1942–1943, Report of. By A. I. Levorsen, representative. The Association Round Table . . 698
Research Committee, Report of Chairman on. By A. I. Levorsen. The Association Round Table 697
Research Notes 651, 1552, 1653
Research Study Groups and Conferences. Research Note by M. G. Cheney 1552
Reserves in Action. By William B. Heroy 954
Reservoir Traps, Proposed New Classification of, and Stratigraphic Type Oil Fields. Discussion by C. W. Sanders 539
Reservoirs, Oil, Classification of. Discussion by H. R. Lovely 224
Resources of New Mexico, Oil and Gas. By Robert L. Bates and Others. Review by E. Russell Lloyd 1010
Review of Developments in 1942, Gulf Coast of Upper Texas and Louisiana. By G. J. Smith 730
——— of Petroleum Geology in 1942. By F. M. Van Tuyl *et al.* Review by John L. Ferguson 1164
Reviews and New Publications 92, 225, 551, 652, 1010, 1157, 1266, 1393, 1556, 1643
Reynolds, Roy A. Memorial by J. Elmer Thomas 1169
Richards, A. R., Barr, K. W., and Morton, F. Application of Chemical Analysis of Crude Oils to Problems of Petroleum Geology 1595
Rixleben, B. Memorial of William Weaver Keeler 564
Roach, C. B. Subsurface Study of Jennings Field, Acadia Parish, Louisiana 1102
Rocks, Traverse, of Thunder Bay Region, Michigan. By Aldred S. Warthin, Jr. and G. Arthur Cooper 571
———, Upper Desmoinesian and Lower Missourian, in Northeastern Oklahoma and Southeastern Kansas. Geological Note by Malcolm C. Oakes and John M. Jewett 632

Rocky Mountain Region, Developments in 1942. By R. M. Larsen 854
———, Occurrences and Types of Crude Oils in. By J. G. Crawford and R. M. Larsen . . 1305
——— of United States, Structural Conditions of Oil and Gas Accumulation in. By C. E. Dobbin 417
Rose, Nicholas A. Ground Water and Relation of Geology to Its Occurrence in Houston District, Texas 1081
Roth, Robert. Origin of Siliceous Dockum Conglomerates 622
Russell County, Virginia, Deep Well in. Geological Note by James H. C. Martens 1543

Sacramento Valley, East Side of, Shasta and Butte Counties, California: Cretaceous. By W. P. Popenoe 306
——— South of Willows, Glenn County, California, Upper Cretaceous Stratigraphy of West Side of. By J. M. Kirby 279
St. Martin Parish, Louisiana, Anse La Butte Dome. By Fred W. Bates and J. B. Wharton, Jr. 1123
Salt-Dome Formation, Mechanics of, Recent Experimental and Geophysical Evidence of. By L. L. Nettleton . . . . . 51.
Salt Stock in Gulf Coast Salt Plug in Late Oligocene, Evidence of Erosion of. Geological Note by Marcus A. Hanna 85
Sanders, C. W. Stratigraphic Type Oil Fields. Discussion 1392
———. Stratigraphic Type Oil Fields and Proposed New Classification of Reservoir Traps. Discussion 539
Santa Barbara County, California, Eocene Stratigraphy in Santa Ynez Mountains. By Frederic Richard Kelley 1
Santa Maria Basin, California, Origin of Radiolarites, and Fracturing of "Fracture Shale" in. Geological Note by Gerard Henny 1622
Santa Maria District, California, Stratigraphy and Paleontology of. By W. P. Woodring, M. N. Bramlette, and K. E. Lohman 1335
Santa Ynez Mountains, Santa Barbara County, California, Eocene Stratigraphy in. By Frederic Richard Kelley 1
Schenck, Hubert G. Review of Stratigraphy of Northern South America, Trinidad, and Barbados, by H. H. Renz 92
Schenck, Hubert G., and Muller, Siemon Wm. Standard of Cretaceous System 262
Schneider, W. T. Wasson Field, Yoakum and Gaines Counties, Texas 479
Schuchert, Charles. Memorial by E. H. Sellards 1027
———. Stratigraphy of Eastern and Central United States. Review by W. H. Twenhofel . 1016
Scientific and Professional Occupations, List of 1550
Scientific and Technical Personnel, Deferment of. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1549
Second-Hand Book Dealers. Geological Note by A. I. Levorsen 996
Secretary-Treasurer, Report of. By Edmond O. Markham. The Association Round Table . 674
Sediments, Tertiary, Northeast of Morgan Hill, California. Geological Note by Charles M. Gilbert 640
Seguin Formation of Central Texas, Stratigraphy and Age of. By M. W. Beckman and F. E. Turner 608
Sellards, E. H. Memorial of Charles Schuchert 1027
Shasta and Butte Counties, California, East Side Sacramento Valley: Cretaceous. By W. P. Popenoe 306
Sidney Powers Memorial Medal Award of the American Association of Petroleum Geologists, Rules for. The Association Round Table 879
Sidney Powers Memorial Medal Fund 1651
———. By A. Rodger Denison. The Association Round Table 1277
Siliceous Dockum Conglomerates, Origin of. By Robert Roth 622
Simpson of Oklahoma, Three More Graptolites from. Geological Note by Charles E. Decker 1388
Singewald, Joseph T., Jr. Memorial of Tracy Gillette 238
Sloss, L. L., and Perry, E. S. Big Snowy Group: Lithology and Correlation in Northern Great Plains 1287
Smith, G. J. Review of Developments in 1942, Gulf Coast of Upper Texas and Louisiana . 730
Smith, H. T. U. Aerial Photographs and Their Applications. Review by Louis Desjardins . 1160
Smith, Philip S. Memorial of George C. Martin 1280
Society of Economic Paleontologists and Mineralogists. Financial Statement, 1942. The Association Round Table 408
——— of Economic Paleontologists and Mineralogists, Newly Elected Officers. The Association Round Table 662

——— of Economic Paleontologists and Mineralogists, Titles of Papers Presented at Annual Meeting. The Association Round Table 669
——— of Economic Paleontologists and Mineralogists, American Association of Petroleum Geologists, Society of Exploration Geophysicists. Joint Annual Meeting, Fort Worth, April 7–9, 1943. By F. L. Aurin. The Association Round Table. 233, 316, 662
——— of Economic Paleontologists and Mineralogists, American Association of Petroleum Geologists, and Society of Exploration Geophysicists. Joint Annual Meeting, March 21–23, 1944, Dallas, Texas. Announcement. At Home and Abroad 1564
——— of Exploration Geophysicists, Newly Elected Officers. The Association Round Table 662
——— of Exploration Geophysicists, Titles of Papers Presented at Annual Meeting. The Association Round Table 669
——— of Exploration Geophysicists, American Association of Petroleum Geologists, Society of Economic Paleontologists and Mineralogists. Joint Annual Meeting, Forth Worth, April 7–9, 1943. By F. L. Aurin. The Association Round Table. 233, 316, 662
——— of Exploration Geophysicists, American Association of Petroleum Geologists, Society of Economic Paleontologists and Mineralogists. Joint Annual Meeting, March 21–23, 1944, Dallas, Texas. Announcement. At Home and Abroad 1564
Some Factors Influencing Declining Rate of Crude-Oil Discoveries—The Geologist's Responsibilities in the Present Situation. By L. F. McCollum 960
Source of Bulletin Papers. The Association Round Table 685
South America, Northern, Trinidad, and Barbados, Stratigraphy of. By H. H. Renz. Review by Hubert G. Schenck 92
South Dakota, Two Deep Water Wells near Rapid City. Geological Note by John Paul Gries 646
South Texas, Developments in 1942. By Frith C. Owens and E. A. Taegel 739
———, Problem of Pre-Trinity Deposits in. By F. M. Getzendaner 1228
Southeastern Kansas and Northeastern Oklahoma, Upper Desmoinesian and Lower Missourian Rocks in. Geological Note by Malcolm C. Oakes and John M. Jewett 632
Southeastern New Mexico and West Texas, Developments in 1942. By Robert I. Dickey and Bernerd A. Ray 747
Southeastern United States, Developments in 1942. By Mississippi Geological Society . . 990
Southeastern West Virginia, Regional Metamorphism of Coal in. By E. T. Heck 1194
Spavinaw Granite, Oklahoma, New Evidence Concerning Age of. Geological Note by W. E. Ham and R. H. Dott 1626
Standard of Cretaceous System. By Siemon Wm. Muller and Hubert G. Schenck 262
Stevens, Donald R., and Gruse, William A. Chemical Technology of Petroleum. Review by Benjamin T. Brooks 652
Stevenson, Frank V. Onondagan Equivalent in New Mexico. Geological Note 220
Stratigraphic Type Oil Fields. Discussion by C. W. Sanders 1392
Stratigraphic Type Oil Fields and Proposed New Classification of Reservoir Traps. Discussion by C. W. Sanders 539
Stratigraphic Units, New Technique for Measurement of. Geological Note by Bernhard Kummel, Jr. 220
Stratigraphy, Eocene, in Western Santa Ynez Mountains, Santa Barbara County, California. By Frederic Richard Kelley 1
———, Eocene, of Chico Martinez Creek Area, Kern County, California. By John F. Curran 1361
——— of Deep Well in Harrison County, West Virginia. Geological Note by James H. C. Martens. 1539
——— of Eastern and Central United States. By Charles Schuchert. Review by W. H. Twenhofel 1016
——— of Northern South America, Trinidad, and Barbados. By H. H. Renz. Review by Hubert G. Schenck 92
———, Subsurface, and Lithology of Tuscaloosa Formation in Southeastern Gulf Coastal Plain. By Arthur C. Munyan 596
———, Upper Cretaceous, of West Side of Sacramento Valley South of Willows, Glenn County, California. By J. M. Kirby 279
Stratigraphy and Age of Seguin Formation of Central Texas. By M. W. Beckman and F. E. Turner 608
Stratigraphy and Paleontology of Santa Maria District, California. By W. P. Woodring, M. N. Bramlette, and K. E. Lohman 1335
Stratigraphy and Structure of Moose Mountain Area, Alberta. By Donald J. MacNeil . . 38
Structural Conditions of Oil and Gas Accumulation in Rocky Mountain Region of United States. By C. E. Dobbin 417
Structural Geology. By Marland P. Billings. Review by A. J. Eardley 1157

Structure of Central Tennessee. By Charles W. Wilson, Jr., and Kendall E. Born 1039
Structure and Stratigraphy of Moose Mountain Area, Alberta. By Donald J. MacNeil . . 38
Student Merit Award, West Texas Geological Society. The Association Round Table . . . 659
Students, Geology, Survey of. Research Note by A. I. Levorsen 651
Study Groups and Conferences, Research. Research Note by M. G. Cheney 1552
Subsurface Stratigraphy and Lithology of Tuscaloosa Formation in Southeastern Gulf Coastal Plain. By Arthur C. Munyan 596
Subsurface Study of Jennings Field, Acadia Parish, Louisiana. By C. B. Roach 1102
Summary of Important Developments in Petroleum Geology, 1943 1653
Supplementary Membership List, September 4, 1943. The Association Round Table . . . 1275
Survey of Geology Students. Research Note by A. I. Levorsen 651
Swain, James F. Interpretation of Cable-Tool Drilling Logs. Geological Note 997
Symposium on Secondary Recovery and Stripper Wells, with Particular Reference to Geological Factors, Titles of Papers on. The Association Round Table 664
———, Titles of Papers on Favorable Areas for Wildcatting for War Needs. The Association Round Table 665
———, Titles of Papers on Maintaining Geophysical Operations during the War. The Association Round Table 665
———. Titles of Papers on Secondary Recovery and Stripper Wells, with Particular Reference to Geological Factors. The Association Round Table 664
———, Titles of Papers on the Different Fields of Geology as Aids to the Discovery of Petroleum. The Association Round Table 665

Taegel, E. A., and Owens, Frith C. Developments in South Texas in 1942 739
Taliaferro, Nicholas L. Franciscan-Knoxville Problem 109
Tapp, P. F., and Plummer, F. B. Technique of Testing Large Cores of Oil Sands 64
Technical and Scientific Personnel, Deferment of. Geological Note by Chester R. Longwell, chairman, Committee on War Effort, Geological Society of America 1549
Technique, New, for Measurement of Stratigraphic Units. Geological Note by Bernhard Kummel, Jr. 220
——— of Testing Large Cores of Oil Sands. By F. B. Plummer and P. F. Tapp 64
Technology, Chemical, of Petroleum. By William A. Gruse and Donald R. Stevens. Review by Benjamin T. Brooks 652
——— of Fine Particles, Micromeritics. By J. M. Dallavalle. Review by W. C. Krumbein . 1163
Technology and Development, Petroleum, 1943. By A. I. M. E. Petroleum Division. Review by J. Zaba 1556
Tennessee, Central, Structure of. By Charles W. Wilson, Jr., and Kendall E. Born . . . 1039
Tertiary Geology and Oil and Gas Prospects in Dakota Basin of North Dakota. By Ray V. Hennen 1567
Tertiary Sediments Northeast of Morgan Hill, California. Geological Note by Charles M. Gilbert 640
Tertiary Sequence in Papua and the Mandated Territory of New Guinea, Note on Present Knowledge of. By Irene Crespin. Review by Burton Wallace Collins 1266
Testing Large Cores of Oil Sands, Technique of. By F. B. Plummer and P. F. Tapp . . . 64
Texas, Bowers Field, Montague County. By Augustus Bart Brown 20
———, Central, Stratigraphy and Age of Seguin Formation of. By M. W. Beckman and F. E. Turner 608
———, East, Developments in 1942. By R. M. Trowbridge and T. J. Burnett 782
———, Embar Field, Andrews County. Geological Note by Taylor Cole 538
———, Ground Water and Relation of Geology to Its Occurrence in Houston District. By Nicholas A. Rose 1081
———, North, Bearing of Foraminifera and Ostracoda on Lower Cretaceous Fredericksburg-Washita Boundary of. By Frank E. Lozo, Jr. 1060
———, North and West-Central, New Developments in, 1942. By North Texas Geological Society 771
———, South, Developments in 1942. By Frith C. Owens and E. A. Taegel 739
———, South, Problem of Pre-Trinity Deposits in. By F. M. Getzendaner 1228
———, Wasson Field, Yoakum and Gaines Counties. By W. T. Schneider 479
———, West, and Southeastern New Mexico, Developments in 1942. By Robert I. Dickey and Bernerd A. Ray 747
Texas and Louisiana, Upper, Gulf Coast of, Review of Developments in 1942. By G. J. Smith 730
Thomas, J. Elmer. Memorial of Roy A. Reynolds 1169
Thompson, M. L. Pennsylvanian System in New Mexico. Review by R. V. Hollingsworth . 1158
Three More Graptolites from Simpson of Oklahoma. Geological Note by Charles E. Decker . 1388

Thunder Bay Region, Michigan, Traverse Rocks of. By Aldred S. Warthin, Jr. and G. Arthur Cooper 571
Titles of Papers, Annual Association Meeting, Fort Worth, Texas, April 7–9, 1943. The Association Round Table 664
——— of Papers, Pacific Section Annual Meeting. The Association Round Table 1559
Total Membership of Association by Years. The Association Round Table 675
Tour, Distinguished Lecture Committee. By John L. Ferguson. At Home and Abroad . . 1565
Traverse Rocks of Thunder Bay Region, Michigan. By Aldred S. Warthin, Jr. and G. Arthur Cooper 571
Trinidad, Barbados, and Northern South America, Stratigraphy of. By H. H. Renz. Review by Hubert G. Schenck 92
Tri-State Zinc and Lead Mining District, Geophysical Investigations in. Geological Note by J. J. Jakosky, R. M. Dreyer, and Clyde H. Wilson 86
Trowbridge, R. M., and Burnett, T. J. Developments in East Texas in 1942 782
True Thickness of a Folded Bed, Calculating,—Correction. Geological Note by G. D. Hobson 874
Turner, F. E., and Beckman, M. W. Stratigraphy and Age of Seguin Formation of Central Texas 608
Tuscaloosa Formation in Southeastern Gulf Coastal Plain, Subsurface Stratigraphy and Lithology of. By Arthur C. Munyan 596
Twenhofel, W. H. Review of Stratigraphy of Eastern and Central United States, by Charles Schuchert 1016
Twentieth Annual Meeting of Pacific Section, October 15, 1943, Ambassador Hotel, Los Angeles, California. The Association Round Table 1559
Twenty-Eighth Annual Business Meeting, Hotel Texas, Fort Worth, Texas, April 8–9, 1943, Minutes. By Edmond O. Markham. The Association Round Table 670
Twenty-Eighth Annual Meeting, American Association of Petroleum Geologists, Hotel Texas, Fort Worth, Texas, April 7–9, 1943. The Association Round Table 662
Twenty-Ninth Annual Meeting of the Association, March 21–23, 1944, Dallas, Texas. Announcement. At Home and Abroad 1564, 1652
Two Deep Water Wells near Rapid City, South Dakota. Geological Note by John Paul Gries 646
Type Lodo Formation, Fresno County, California, Eocene Foraminifera from. By Lois T. Martin. Review by Merle C. Israelsky 1269
Types of Crude Oils and Occurrences in Rocky Mountain Region. By J. G. Crawford and R. M. Larsen 1305
Types and Occurrences of Crude Oils in Rocky Mountain Region. By J. G. Crawford and R. M. Larsen 1305

Union Now, Geological. Discussion by Carey Croneis 1001
United States, Eastern and Central, Stratigraphy of. By Charles Schuchert. Review by W. H. Twenhofel 1016
———, Notes on the Early History of Water-Well Drilling in. By Charles W. Carlston. Review by John L. Ferguson 1268
———, Oil and Gas Field Development in, 1941. By National Oil Scouts and Landmen's Association. Review by Lee H. Cornell 555
———, Southeastern, Developments in 1942. By Mississippi Geological Society 990
———, Structural Conditions of Oil and Gas Accumulation in Rocky Mountain Region of. By C. E. Dobbin 417
Upper Cretaceous Stratigraphy of West Side of Sacramento Valley South of Willows, Glenn County, California. By J. M. Kirby 279
Upper Desmoinesian and Lower Missourian Rocks in Northeastern Oklahoma and Southeastern Kansas. Geological Note by Malcolm C. Oakes and John M. Jewett 632
Upper Jurassic Landmass in Eastern Mexico, Evidence for. Geological Note by Ralph W. Imlay 524
Upper Texas and Louisiana, Gulf Coast of, Review of Developments in 1942. By G. J. Smith 730
Use and Interpretation of Aerial Photographs. By A. J. Eardley. Review by Louis Desjardins 95

Van Tuyl, F. M. Summary of Important Developments in Petroleum Geology, 1943. Research Notes 1653
Van Tuyl, F. M., and LeRoy, L. W. Review of Geologic Formations and Economic Development of the Oil and Gas Fields of California, by Olaf P. Jenkins *et al.* 1393
Van Tuyl, F. M., *et al.* Review of Petroleum Geology in 1942. Review by John L. Ferguson . 1164
Venezuela, Fossils from Metamorphic Rocks of Coast Range of. Geological Note by Philip P. Wolcott 1632
Ver Wiebe, Walter A. Report of Editor. The Association Round Table 682

Victoria, Physiography of. By E. Sherbon Hills. Review by Burton Wallace Collins . . . 652
Virginia, Deep Well in Russell County. Geological Note by James H. C. Martens 1543
von Engeln, O. D. Geomorphology. Review by M. G. Cheney 225
War, The Petroleum Geologist and the. By Fritz L. Aurin 929
War Department Needs Foreign Maps. The Association Round Table 1560
War Effort, Committee on, Geological Society of America. New Aid in Handling Personnel Problems in Geology. Geological Note by Chester R. Longwell, chairman 1548
Warthin, Aldred S., Jr., and Cooper, G. Arthur. Traverse Rocks of Thunder Bay Region, Michigan 571
Wartime Changes in Petroleum Industry. By Richard J. Gonzalez 970
Washita-Fredericksburg Boundary, Lower Cretaceous, of North Texas, Bearing of Foraminifera and Ostracoda on. By Frank E. Lozo, Jr. 1060
Wasson Field, Yoakum and Gaines Counties, Texas. By W. T. Schneider 479
Water-Well Drilling in the United States, Notes on the Early History of. By Charles W. Carlston. Review by John L. Ferguson 1268
Water Wells, Two Deep, near Rapid City, South Dakota. Geological Note by John Paul Gries 646
Well, Deep, in Harrison County, West Virginia, Stratigraphy of. Geological Note by James H. C. Martens 1539
———, Deep, in Russell County, Virginia. Geological Note by James H. C. Martens . . . 1543
Wells, Two Deep Water, near Rapid City, South Dakota. Geological Note by John Paul Gries 646
West Texas and Southeastern New Mexico, Developments in 1942. By Robert I. Dickey and Bernerd A. Ray 747
West Texas Geological Society Student Merit Award. The Association Round Table . . 659
West Virginia, Natural Coal Gas in. Geological Note by Paul H. Price and A. J. W. Headlee . 529
———, Southeastern, Regional Metamorphism of Coal in. By E. T. Heck 1194
———, Stratigraphy of Deep Well in Harrison County. Geological Note by James H. C. Martens 1539
Wharton, J. B., Jr., and Bates, Fred W. Anse La Butte Dome, St. Martin Parish, Louisiana . 1123
Wildcat Drilling in 1942. By Frederic H. Lahee 715
Wildcat Test, Williston Basin, Oliver County, North Dakota. Geological Note by Allen Ehlers 1618
Williams, George Arthur. Student Merit Award. The Association Round Table 659
Williston Basin Wildcat Test, Oliver County, North Dakota. Geological Note by Allen Ehlers 1618
Willows, Glenn County, California, Upper Cretaceous Stratigraphy of West Side of Sacramento Valley South of. By J. M. Kirby 279
Wilson, Charles W., Jr., and Born, Kendall E. Structure of Central Tennessee 1039
Wilson, Clyde H., Jakosky, J. J., and Dreyer, R. M. Geophysical Investigations in Tri-State Zinc and Lead Mining District. Geological Note 86
Wolcott, Philip P. Fossils from Metamophic Rocks of Coast Range of Venezuela. Geological Note. 1632
Wolfram, Bertram, Jr. Student Merit Award. The Association Round Table 659
Woodring, W. P., Bramlette, M. N., and Lohman, K. E. Stratigraphy and Paleontology of Santa Maria District, California 1335

Yoakum and Gaines Counties, Texas, Wasson Field. By W. T. Schneider 479

Zaba, J. Review of Petroleum Development and Technology, 1943, by A.I.M.E. Petroleum Division 1556
Zinc and Lead Mining District, Tri-State, Geophysical Investigations in. Geological Note by J. J. Jakosky, R. M. Dreyer, and Clyde H. Wilson 86
ZoBell, Claude E., Grant, Carroll W., and Haas, Herbert F. Marine Microörganisms Which Oxidize Petroleum Hydrocarbons 1175